Description for Bottlenose Dolphin

Two maps (Figures 4.29 and 4.32) are shown for the bottlenose dolphin (Tursiops truncatus) in the study area; both maps use data from NOAA's Southwest Fisheries Science Center. Off California, there are two stocks or populations of this species: Figure 4.32 contains sightings and an estimated range from coastal aerial surveys in 1990-2000 for the California Coastal stock in the study area; and Figure 4.29 contains sightings from shipboard surveys (1991-2001) for the California, Oregon and Washington offshore stock. The sightings only confirm that bottlenose dolphin have been sighted in certain areas; rather than a real absence from an area or time period, the absence of sightings of a species may reflect insufficient survey effort. A map was not made from the CDAS central California data set, 2003, but this data set includes 14 sightings of 45 bottlenose dolphins, mostly in the nearshore waters of Monterey Bay. The most northerly sighting of this species in the CDAS data set is in the Gulf of the Farallones Marine Sanctuary, about 25 km due west of San Francisco.

Bottlenose dolphin occur throughout the world in tropical and warm temperate waters (Carretta *et al.*, 2006). The California coastal stock generally occurs within one kilometer of shore, over the inner shelf; this stock occurs mostly off southern California and into Mexican waters, but moves northward into central California during warm-water periods and was sighted as far north as San Francisco (Carretta *et al.*, 2006) The offshore stock has been sighted mostly in the southern California Bight; north of there the sightings are well offshore, over the slope and deep offshore waters, to 41°N; they may move north into waters off Oregon and Washington during warm water periods.

As of 2007, these two stocks are not listed as "threatened" or "endangered" under the Endangered Species Act nor as "depleted" under the Marine Mammal Protection Act. Habitat issues for the coastal stock include pollution levels, especially DDT residues; no habitat issues were identified for the offshore stock (Carretta *et al.*, 2006). Coastal bottlenose dolphins eat a wide variety of fish, squid, and crustaceans while offshore bottlenose dolphins prefer squid. Bottlenose dolphins are sometimes preyed upon by killer whales or large sharks.

Description for Short-beaked Common Dolphin

Figure 4.28 includes a sighting map for the short-beaked common dolphin (*Delphinus delphis*) off the coast of California, Oregon and Washington; this map is based on data from shipboard surveys (1991, 1993, 1996 and 2001) by NOAA's South-west Fisheries Science Center. A map was not made of sightings from the CDAS central California data set, 2003, but that data set includes 35 sightings of 2,255 common dolphins, mostly seaward of the 200 m contour. The most northerly sighting of this species in the CDAS data set is in the Gulf of the Farallones Marine Sanctuary, about 10 km southwest of Pt. Reyes.

This species is the most abundant cetacean off California and occurs from the coast out to at least 500 km offshore; off central California, it mostly occurs well offshore, over slope habitats and beyond). The weighted average abundance estimate for the California, Oregon and Washington stock is 449,846 (CV= 0.25), and is based on two ship surveys (1996 and 2001, Barlow, 2003). There may be two stocks of this species off California, but this has not yet been formally recognized.

The distribution of the California stock of a similar species, the long-beaked common dolphin (Delphinus capensis) partially overlaps some of the distribution of the short-beaked common dolphin; the long-beaked common dolphin occurs mostly off southern California and Baja California generally within about 90 km of the coast; the shortbeaked-common dolphin occurs nearshore but mostly occurs offshore (it has been sighted to out to 550 km) and north to approximately 42°N in the SWFSC surveys. The California stock of the longbeaked common dolphin is estimated to be less than one tenth the size of the short-beaked stock off California, Oregon and Washington. (Carretta et al., 2006). This species was not mapped because there were few sightings for the study area in the available data bases.

The short-beaked common dolphin is widely but discontinuously distributed in tropical and temperate waters of the Atlantic and Pacific; the species appears to select areas with a surface water temperature of 10°C-20°C, but it may follow warm-water currents beyond its normal distribution. In the

